

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 January 2001 (04.01.2001)

PCT

(10) International Publication Number
WO 01/01554 A1

(51) International Patent Classification⁷: **H02M 7/538,**
H03F 3/217

(21) International Application Number: PCT/YU00/00014

(22) International Filing Date: 7 June 2000 (07.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
P-308/99 29 June 1999 (29.06.1999) YU

(71) Applicants and

(72) Inventors: **PROKIN, Milan** [YU/YU]; Dr Agostina Neta
76/64, YU-11070 Novi Beograd (YU). **CVETINOVIC,**
Milenko [YU/YU]; Save Kovacevica 36A, YU-11000
Beograd (YU).

(74) Agent: **ZIVKOVIC, Zoran**; Prote Mateje 22, YU-11000
Beograd (YU).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE,
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

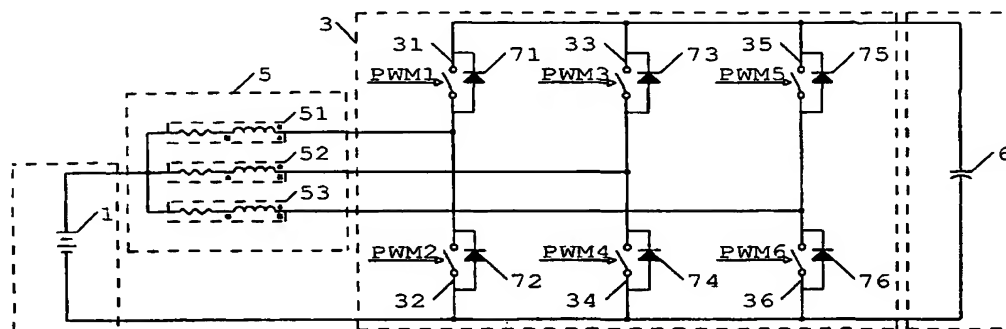
(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- With amended claims and statement.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **BOOST BRIDGE AMPLIFIER**



(57) Abstract: The main difference between the boost bridge amplifier according to this invention and state of the art class D amplifiers is in the connection of a load between a power supply and a switching bridge which is supplied from a bridge capacitor. The switching bridge operation is controlled by the pulse-width modulated control signals. Thereby, it is possible to completely eliminate both input and output filters, which are required in state of the art class D amplifiers. It is also possible to achieve several times higher power at the load, due to the additional switching bridge supply from the bridge capacitor. Conducted and radiated EMI noise is significantly reduced in comparison with state of the art class D amplifiers. This embodiment provides a low price, small size and low EMI noise level.

WO 01/01554 A1